

Professional Practices in the Built Environment

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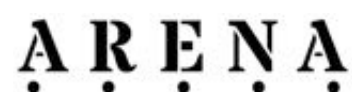
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Knowledge and Architectural Practice

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Abstract

This paper focuses on the specific knowledge residing in architectural practice. It is based on the research of 35 PhD fellows in the ADAPT-r (Architecture, Design and Art Practice Training-research) project. The ADAPT-r project innovates architectural research in combining expertise from academia and from practice in order to highlight and extract the specific kind of knowledge which resides and is developed in architectural practice (creative practice research).

The paper will discuss three ongoing and completed PhD projects and focusses on the outcomes and their contribution to the field. Specific to these research projects is that the researcher is within academia but stays emerged in architectural practice. The projects contribute to a better understanding of architectural practice, how it develops and what kind of knowledge is crucial.

Furthermore, the paper will develop a reflection of the level of research methods and will explain that the research methods and processes in creative practice research are very similar to grounded theory which is an established research method in the social sciences.

Finally, an argument will be made for a more explicit research attitude in architectural practice as it is the central place of innovation and development in the architectural discipline.

Keywords: creative practice research, ADAPT-r; research by design, architectural knowledge

Introduction

Research by design has been discussed in schools of architecture for many years. One of the early efforts to better integrate research and design was initiated by Halina Dunin-Woyseth through the introduction of a PhD programme in the early 1990s at the School of Architecture in Oslo (AHO) (Dunin-Woyseth 2008). In RMIT Melbourne, Leon van Schaik developed a long-standing program of research initially through a Masters' and later on a PhD programme, with a focus on researching 'what venturesome designers actually do when they design' (Van Schaik and Johnson, 2011). In 2000 TU Delft organised a crucial conference on the topic, covering innovative research in architecture school studios and in practice (Langenhuizen, van Ouwenkerk, and Rosemann 2001). Between 2005-2010 a series of research seminars took place at Sint-Lucas School of Architecture in Flanders, with the express aim of boosting research activities, and as a forum through which to understand, develop and validate explorative, expressive and speculative design methodologies and outputs that are unique to architecture. These workshops have been captured in a series of publications produced between 2005-2013, charting the growth and development of research by and through design at the Sint-Lucas School (Janssens et al. 2006; Hendrickx et al. 2008; Verbeke 2008). These seminars were complemented with 2 major conferences: The Unthinkable Doctorate in 2005 and Communicating by Design in 2009 (Verbeke and Belderbos 2007; Verbeke and Jakimowicz 2009).

The development of research in architecture has also been discussed across European architecture schools, with the development of a consensus of how research by design should be defined. Indeed, the author heavily contributed to the development of the EAAE Charter on

Architectural Research (EAAE, 2012). The charter was approved by the EAAE General Assembly after a series of preparatory meetings and includes the following paragraphs:

In architecture, design is the essential feature. Any kind of inquiry in which design is the substantial constituent of the research process is referred to as research by design.

In research by design, the architectural design process forms the pathway through which new insights, knowledge, practices or products come into being. It generates critical inquiry through design work. Therefore research results are obtained by, and consistent with experience in practice.

(EAAE, 2012)

Research by Design was further developed in a paper by Verbeke (2013), setting out a concern to explore the nature and processes of architectural design, as well as illuminating examples drawn from the Sint-Lucas PhD by Practice programme.

It was within this context, building on a rich pedigree of work and in particular the experience with RTS and the focus of the RMIT programme on the process of design, that the ADAPT-r – Architecture, Design and Art Practice Training-research – programme was born.

The ADAPT-r project brought together seven partners in a project funded under the Marie Curie scheme of FP7¹. The project ran between 2013 and 2016. The partners were Sint-Lucas School of Architecture (KU Leuven, coordinator), RMIT Europe, Glasgow School of Arts, University of Ljubljana, University of Westminster, Aarhus School of Architecture and the Estonian Academy of Arts. The project

¹ www.adapt-r.eu

targeted venturesome practitioners and pulled them into an academic environment where they developed their PhD research. The project hosted 35 early stage researchers (PhDs) and 7 experienced researchers (post-docs). The development of the research questions and methods was explicitly based on the creative work researchers undertook in practice.

The overall objective of the project was to create critical mass in creative practice research. Up till the ADAPT-r project, endeavours in schools of architecture in Europe towards research by design, creative practice research and artistic explorations were fragmented, never embedded in an international undertaking and were mostly initiated by individuals. Furthermore, the project aimed to create a large amount of cases which could be studied and learnt from in order to deepen the methodological understanding.

Within the ADAPT-r project the research fellows have been stimulated to explore their past projects as case studies and to reflect upon their communities of practice, transformative triggers, public behaviour, tacit knowledge and to explicate their methods. These areas can be seen as lenses through which pieces of the research puzzle come into being. In most cases these initial puzzle pieces are complemented by mappings and other insights that contribute to the overall knowledge generated by the research.

During their research, most of the ADAPT-r fellows went through a series of mappings of their practice, of their projects, of how they relate to other practices, etc. These mappings can be seen as a form of coding which is custom in Grounded Theory (Charmaz, 2014). Grounded Theory is a research method which does not start from a hypothesis, but instead builds on the data/information at hand and develops a theory through thematic coding. We will later argue that the function of the

mappings of practice is very similar to that which is done in Grounded Theory.

The following section describes three of the research projects which took place within the context of the ADAPT-r programme.

Three Cases of Creative Practice Research

I. Siv Helene Stangeland

Siv Helene Stangeland is one of the partners in Helen & Hard, one of the leading architectural offices in Norway. Siv obtained an ADAPT-r fellowship at the School of Architecture in Aarhus, Denmark where she undertook her doctoral research.

The research started just after Helen & Hard defined their relational design approach in a monography published in 2012. The term relational design was introduced to define a design philosophy, a methodology and the characteristic capacities of what the office understands to be ecological architecture. The doctoral research started with an exploration and mapping of the different epochs of growth of the office. Eight periods were defined. Throughout the research the focus has shifted towards knowing and articulating the spatial aesthetic and experiential qualities of the design itself. The beautiful drawings of Siv played a crucial role in exploring these understandings.

Through the research process, the many projects of the office were explored, mapped and the crucial elements highlighted through the development of key words. It became apparent that drawings were a crucial tool in finding and explicating these elements. The drawings helped to reveal new insights of the practice, the underlying forces and values. As Stangeland states in her thesis:

On one level this research is expanding the knowing of the intrinsic ecological potentials of architecture which lies in its relational nature and

how a better explication of these spatial aesthetic capacities may contribute to produce environmental well being. On an other level it lifts this knowing to a very pragmatic field of operating and practicing in a market, and the conditions and frameworks which can care for and protect this unique professional knowing.

(Stangeland, 2016)

Figure 1 below shows one of the many mappings Siv Helene was producing in the beginning of her project,. Figure 2 shows one of

the wonderful drawings which helped to highlight key elements of projects. The different lines, wilding and weaving, play a key role in developing the understanding. As will be clear from these drawings, which were made by her during the research project, they focus on elements which would never have emerged when the researcher was not the designer as well.

Siv Helene Stangeland successfully defended her doctoral research in Aarhus in February 2017.

epoch 5, 2000-2005



Figure 1: Mapping of Epoch 5 in the development of Helen & Hard (Image by Siv Helene Stangeland)



Figure 2: A drawing by Siv Helene Stangeland trying to explicate elements of one of the projects of Helen & Hard.

2. Eric Guibert

Eric Guibert is part of the practice sens which is based in London, UK. He obtained an ADAPT-r fellowship at Sint-Lucas School of Architecture (KU Leuven) in Brussels.

As explained in an upcoming book chapter by the author, the doctoral research of Eric Guibert, *Designing like a Gardener*, is deeply rooted in his practice. It intends to explore through the design and realisation of projects how a gardener's conception of space as microclimates – in which plants, and people (or vice versa) might thrive – has been subconsciously transferred to the discipline of architecture in the past projects of his practice, as well as how it could be further and more rigorously applied in future ones. During the stage of theory building, the methodology of the gardener has been defined as a manual of elements, tools, ways and principles that aims to design with the agency of life in order to

support diversity and express a dialectical aesthetic.

The project started with exploring and investigating the projects of the practice. And then it proceeded through mapping key elements and concepts in these projects. There are three crucial activities which have played a key role in developing this project:

- Eric Guibert developed many interesting watercolour paintings (see figure 3) that take the form of sections, perspectives and axonometric, as well as diagrams. These paintings allowed Eric to talk or 'interview' himself about the crucial elements in his projects and activities. These have been crucial in coding and categorising the themes in the body of work and the design actions, as well as clarifying a number of concepts used such as the balance between composition and improvisation and its relation to diversity and control. Alongside writing, the paintings have also become a

main tool through which to structure these concepts into a theory.

- A number of ongoing projects have been used to produce more data about the practice's designs and the design process, but also to test concepts and theories generated through the research. This iterative approach not only helped to generate additional data, but also triggered further artistic explorations which helped highlight crucial elements for Designing as a Gardener.
- During winter 2015/16 Eric needed to write an internal report as part of the doctoral procedures. This triggered several versions of theory building, helping to develop certain aspects of the study that had remained hidden before they were revealed

and articulated in the creative process of writing. The iterations in writing, and the discussions with the supervisors, helped him to push the borders of his understanding into the definition of a repertoire of tools, and the ways of using them, that forms the core of the practice and design methodology. Eric is now developing the first draft of the PhD, and is working towards developing a theory, building on his codes and categories and adding new ones to understand the elements and principles behind his design practice.

Eric Guibert is currently in the final phases of his doctoral research and intends to submit later in 2017.



Figure 3: One of many watercolor drawings by Erik Guibert in which he tries to capture and communicate key aspects of his practice and understanding.

3. Ana Krec

Ana Krec is part of the office svet vmes which is based in Ljubljana, Slovenia. She obtained an ADAPT-r fellowship at Sint-Lucas School of Architecture (KU Leuven) in Brussels. svet vmes was founded in 2010 and is one of the young and dynamic offices in Slovenia. The website of the office mentions the goal of the practice as 'to redesign the existing and create new 'spaces in-between'; spaces that teach, inspire and connect people²'. The practice developed by doing several low cost interventions in schools in Ljubljana. One of these, the renovation of the main entry hall in Ledina Grammar School, 2014, is shown in figure 4.

At the start of her doctoral research, Ana Krec explored her past projects and tried to map the

many cases and put her interests in perspective. In her practice svet vmes she was engaged in several projects which were located in school buildings and which tried to exploit the potential of left-over spaces which were not really used by students and staff. At a certain moment she started coding each of the projects, trying to explicate key issues, elements and concepts that played a key role in the development of these projects (see figure 5). This process was repeated in a later phase. As an outcome she became much better aware of the potential of these spaces and also about the driving factors of her practice. Key concepts emerged and shine a new light on the work. She is currently almost half way in her research and tries to further explore and contextualise her ideas and initial findings.



Figure 4: Loggia renovation of the main entry hall Ledina Grammar School, 2014, Ljubljana, Slovenia (image by Matevz Paternoster).

² <https://www.svetvmes.si/about>

INITIAL CODING AND SENTISIZING CONCEPTS



Figure 5: Example of the mappings and coding which Ana Krec developed in order to extract key concepts to better understand and explain her experiences in svet vmes.

Conclusion

When looking in more detail at the above doctoral projects it becomes clear that each of them includes aspects of mapping and coding of the data included in architectural projects and drawings. This is in line with the EAAE (2012) charter for research which states that for research by design 'the architectural design process forms the pathway through which new insights, knowledge, practices or products come into being.'

Grounded Theory was developed by two sociologists, Barney Glaser and Anselm Strauss (Glaser and Strauss 1967). The purpose was to develop theories which are grounded in the data, which fit the data, which work in practice and which are relevant to the field of research. Charmaz (2013, figure 1.1) structures these processes in the following way: data collection, initial coding (examples present in the data or

from new data), focused coding and categorising (incomplete understanding raises questions, fill properties with categories) and theory building. These iterations continue till the categories reach saturation. During the research, initial results and obtained data are constantly compared and systematically improved.

These iterations are very similar to what happened in the research by Siv Helen Stangeland, Eric Guibert and Ana Krec. It is through many coding iterations (in the inclusive interpretation to include mappings and visual structuring of data) that new knowledge and theories come into being. This is the reason why it is proposed to start using the term Designerly Grounded Theory (DGT) for the research process which has a research by design approach.

Furthermore, the above examples give clear cases where architectural practice is crucial for

the research; in fact, it is the place where the 'data' comes into existence. Hence, research by design, creative practice research and designerly grounded theory value architectural practice as the central place of innovation and development in the architectural discipline. They build on experience, insight and understanding which emerges from the act of designing and creating. Consequently, it is clear that the ADAPT-r project deepened our understanding of how research by design or creative practice research can be positioned and developed.

Finally, the above cases show that practitioners value their better and deepened understanding of what they are doing and what is happening in their practice. Hence, the field of architecture should stimulate and foster undertakings which develop a more explicit research attitude in architectural practice as it is the central place of innovation and development in the discipline. It could help us all to reach another level of understanding.

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